

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Roland BERNARD, et al.

Continuation of Appln. No.: 09/614,591,  
Filed: July 12, 2000

Group Art Unit: 1763

Confirmation No.: Not Yet Known

Examiner: R. BUEKER

Filed: October 19, 2001

For: METHOD AND APPARATUS FOR CONDITIONING THE ATMOSPHERE IN A  
PROCESS CHAMBER

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

**IN THE TITLE:**

Please delete the present title and replace it with the following new title:

--AN APPARATUS FOR CONDITIONING THE ATMOSPHERE IN A  
CHAMBER--.

**IN THE SPECIFICATION:**

Amend the specification by inserting before the first line the sentence:

--This is a continuation of Application No. 09/614,591 filed July 12, 2000, the disclosure  
of which is incorporated herein by reference.--.

Page 7, lines 22-27, delete in their entirety, and insert the following new paragraph:

--The primary pump 3 is a variable-speed dry primary pump suitable for delivering at atmospheric pressure. The secondary pump 2 is, for example, a turbomolecular pump suitable for establishing the appropriate low pressure in the process, or vacuum, chamber 1, and for delivering at the inlet pressure of the primary pump 3 via a pipe 30.--.

**IN THE CLAIMS:**

**Please cancel claims 1-20 without prejudice or disclaimer.**

**Please add the following new claims:**

--21 (New). Apparatus for conditioning the atmosphere in a vacuum chamber, said apparatus comprising:

a vacuum line including said vacuum chamber and comprising a pumping apparatus; and  
isolation means enabling the disturbance caused by the pumping apparatus to the vacuum chamber to be reduced.

22 (New). Apparatus according to claim 21, wherein the pumping apparatus is disposed in the immediate vicinity of the vacuum chamber.

23 (New). Apparatus according to claim 22, wherein

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the vacuum line comprises a primary pump and at least one upstream secondary pump;

the primary pump is enclosed in an isolation enclosure.

24 (New). Apparatus according to claim 23, wherein

the vacuum line further comprises gas treatment means adapted for treating the extracted gas downstream from the primary pump;

the gas treatment means are enclosed together with the primary pump in said isolation enclosure.

25 (New). Apparatus according to claim 24, wherein

the vacuum line further comprises gas analyzer means adapted for analyzing the gases inside the vacuum line;

the gas analyzer means are enclosed together with the primary pump and the gas treatment means in said isolation enclosure.

26 (New). Apparatus according to claim 23, wherein the isolation enclosure is provided with temperature monitoring and regulation apparatus for monitoring and regulation apparatus for monitoring and regulating the temperature of the contents of the isolation enclosure.

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27 (New). Apparatus according to claim 23, wherein the isolation enclosure is provided with active vibration-compensating means for compensating the mechanical vibrations generated by the contents of the isolation enclosure.

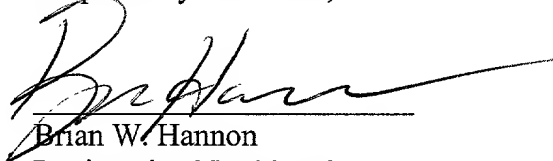
28 (New). Apparatus according to claim 25, wherein the isolation enclosure further encloses a controller, constituting signal processing means for generating a speed control signal for controlling the speed of the primary pump and/or the speed of the secondary pump as a function of signals received from gas analyzer means.--.

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REMARKS

Entry and consideration of this Amendment is respectfully requested. Support can be found at page 3, lines 9-21 and 27-31; page 6, lines 30-34; page 14, lines 17-36; page 15, lines 1-25; claims 16-19 of the application as filed; and Figure 1.

Respectfully submitted,



Brian W. Hannon  
Registration No. 32,778

SUGHRUE, MION, ZINN,  
MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3213  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

Date: October 19, 2001

**APPENDIX**

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE TITLE:**

**The title is changed as follows:**

**“METHOD AND APPARATUS FOR CONDITIONING THE ATMOSPHERE IN  
A PROCESS CHAMBER” to --AN APPARATUS FOR CONDITIONING THE  
ATMOSPHERE IN A CHAMBER --.**

**IN THE SPECIFICATION:**

Page 7, lines 22-27, delete in their entirety, and insert the following new paragraph:

--The primary pump 3 is a variable-speed dry primary pump suitable for delivering at atmospheric pressure. The secondary pump 2 is, for example, a turbomolecular pump suitable for establishing the appropriate low pressure in the process, or vacuum chamber 1, and for delivering at the inlet pressure of the primary pump 3 via a pipe 30.--.

**IN THE CLAIMS:**

**Claims 1-20 are canceled.**

**Claims 21-28 are added as new claims.**

--21 (New). Apparatus for conditioning the atmosphere in a vacuum chamber, said apparatus comprising:

a vacuum line including said vacuum chamber and comprising a pumping apparatus; and

isolation means enabling the disturbance caused by the pumping apparatus to the vacuum chamber to be reduced.

22 (New). Apparatus according to claim 21, wherein the pumping apparatus is disposed in the immediate vicinity of the vacuum chamber.

23 (New). Apparatus according to claim 22, wherein  
the vacuum line comprises a primary pump and at least one upstream secondary pump;  
the primary pump is enclosed in an isolation enclosure.

24 (New). Apparatus according to claim 23, wherein  
the vacuum line further comprises gas treatment means adapted for treating the extracted gas downstream from the primary pump;  
the gas treatment means are enclosed together with the primary pump in said isolation enclosure.

25 (New). Apparatus according to claim 24, wherein  
the vacuum line further comprises gas analyzer means adapted for analyzing the gases inside the vacuum line;

the gas analyzer means are enclosed together with the primary pump and the gas treatment means in said isolation enclosure.

26 (New). Apparatus according to claim 23, wherein the isolation enclosure is provided with temperature monitoring and regulation apparatus for monitoring and regulation apparatus for monitoring and regulating the temperature of the contents of the isolation enclosure.

27 (New). Apparatus according to claim 23, wherein the isolation enclosure is provided with active vibration-compensating means for compensating the mechanical vibrations generated by the contents of the isolation enclosure.

28 (New). Apparatus according to claim 25, wherein the isolation enclosure further encloses a controller, constituting signal processing means for generating a speed control signal for controlling the speed of the primary pump and/or the speed of the secondary pump as a function of signals received from gas analyzer means.--.



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(Use several sheets if necessary)

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## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


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